

ARCHOS

Archos Internet Tablets: towards an open framework, the android revolution!

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ARCHOS | 5 internet tablet

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Positioning

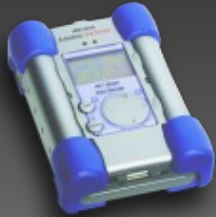
ENTERTAINMENT



CONNECTIVITY

MOBILITY

2000 - Jukebox 6000



2001 - JB Recorder



2002 - AV 120



2003 - AV 300



2004 - AV 400



2005 - PMA 400



2006 - ARCHOS 604



2007 - ARCHOS 605



2008 - ARCHOS 5



7th generation of Archos products is Android-based

- **New product: ARCHOS | *S internet tablet***
 - September 2009: Archos releases its new Wi-Fi connected Internet Tablet.
- **Change of software platform: the Android way**
 - 2009: transition from in house Linux from scratch closed platform (Gen4-6) to open Android framework (SDK available and Apache software license).
- **Goal:**
 - combine the best of Archos multimedia knowhow (HD Video, Music, Photo, TV recording) together with Google's Android operating system and open application framework to cover mobility and connectivity

Uncompromised design in the palm of your hand...



10
mm

Thin

Large screen

Light

Opening up our devices

- Transition to Linux: 2005
- PMA 400:
 - Qtopia-based environment
 - Most Zaurus packages working
 - SDK available
 - Adopted by Linux enthusiasts but not general public
- GPL sources available for all devices
- Android: 2009 (A5IT)
- Developer edition:
 - A5IMT: 2008
 - A5IT: 2009

Motivation for opening

- Strong demand from users
- Open for external innovation and contribution
- Provide a full usable product instead of a board, thus complementing BeagleBoard-type offerings
- Provide external device support beyond its evolution path

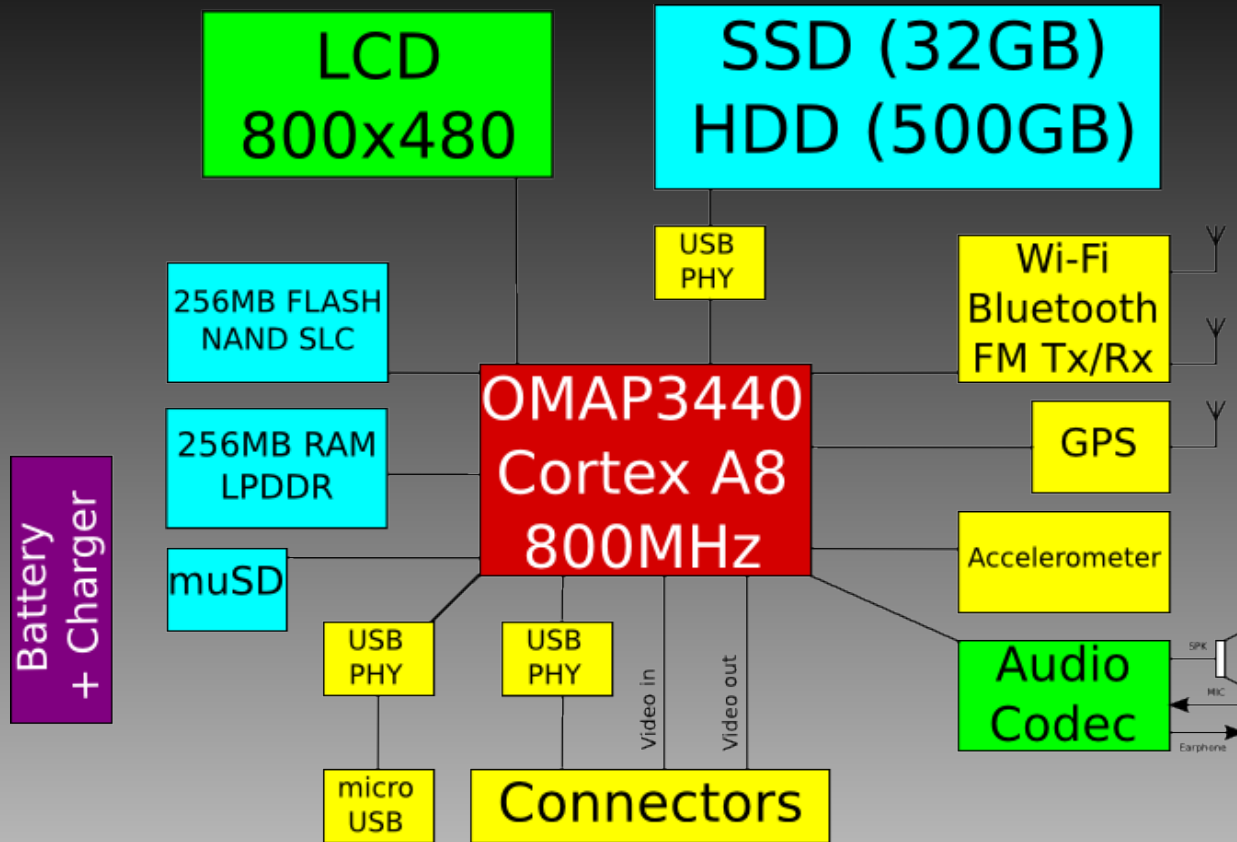
Motivation for dual OS

- **Limited development possibilities with Android:**
 - Java is mandatory
 - Link with native libraries through JNI
 - Strange libc (bionic)
 - No standard framebuffer/X/console...
- **Android is not a standard Linux!**
- **Devices still not open enough for hacking:**
 - Can't flash own firmwares (signature)

What we provide

- Developer's Edition firmware for Archos 5 Internet Tablet (and older Archos 5 Internet Media Tablet)
 - Ångström/OpenEmbedded-based
 - User can change the whole rootfs image
 - DRM keys are lost forever
- Philosophy: seed, let the community do it

A5 IT hardware architecture



Wi-Fi and Bluetooth connectivity, FM transmit and receive capability, a GPS, accelerometer

Specifications

- TI OMAP 3440 (ARM Cortex A8) clocked at 800MHz
- PowerVR SGX 530 GPU at 100MHz – OpenGL ES 2.0
- IVA 2+ (C64x) DSP at 430 MHz
- Portable, mobile device
- Integrated touchscreen (4.8", 800×480)
- Battery powered
- Video out, audio in and USB host on expansion cards
- MicroSD card slot (on flash-based devices)
- GPS, WiFi, BlueTooth, FM Tx/Rx, accelerometer...

Specifications (2)

- Multiple-boot
 - Target as many environments as your storage can handle (including Android)



- Strong acceptance
- Real contributions emerge
- New community (OpenAOS):
<http://www.openaos.org>
- OpenEmbedded build target
- Community provided:
 - Android 2.0
 - Windows 95

- **Powerful and well-equipped multiple usage device:**
 - Hack it at home
 - When you're in the mood, hack on the go
 - When you're not, just use it as a standard tablet
- **Pretty design (WAF ++)**
 - "Look, I've bought you a tablet for your birthday!"
- **Surprise us!**